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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,546	04/03/2000	Pierre Duhot	31640-159397	4816

7590 06/05/2002

Venable  
P.O.Box 34385  
Washington, DC 20043-9998

EXAMINER

MCELWAIN, ELIZABETH F

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 06/05/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/542,546

Applicant(s)

DUHOT ET AL.

Examiner

Elizabeth McElwain

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8, 12-14, 16-21, 23, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-4, 6-8, 12-14, 16-21, 23, 30 and 31 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

The amendments filed March 12, 2002 and December 17, 2001, and the response to the restriction filed March 12, 2002 have been entered.

Claims 1-4, 6-8, 12-14, 16-21 and 23 have been amended.

Claims 30 and 31 are newly submitted.

5 It is noted that Applicants have elected Group I, claims 1-4 and 6. However, upon review of the claims it was determined that there was an error in the wording of the restriction requirement, wherein the claims of Group I are drawn to a methyltransferase not to a cyclopropane fatty acid synthesis enzyme, while the claims of Group IV are drawn to a cyclopropane fatty acid synthesis enzyme not to a methyltransferase. In view of the mix up,  
10 the Examiner left a phone message with Michael Gollin on May 20, 2002 to determine which invention was intended by the election. However, no response was received, so the following supplemental restriction requirement is set forth to clarify the restriction.

#### **Supplemental Restriction Requirement**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- 15 I. Claims 1 and 4-6, drawn to a process for inducing synthesis of branched fatty acids in a plant cell, including where DNA encodes a methyl transferase, classified in class 800, subclass 281, for example.
- II. Claim 2, drawn to a process for inducing synthesis of branched fatty acids in a plant cell, including an extraction step, classified in class 800, subclass 281, for  
20 example.

- III. Claim 3, drawn to a process for inducing synthesis of branched fatty acids in a plant cell, including a treatment step, classified in class 800, subclass 276, for example.
- IV. Claims 1, 4, 5 and 7, drawn to a process for inducing synthesis of branched  
5 fatty acids in a plant cell, including where DNA encodes a cyclopropane fatty acid synthase, classified in class 800, subclass 281, for example.
- V. Claim 8, drawn to a process of claim 4 further comprising a gene for SAM synthetase, classified in class 536, subclass 23.2, for example.
- VI. Claims 9-11, drawn to a process for inducing synthesis of branched fatty acids  
10 in a plant cell where the enzyme uses a substrate of at least 3 carbons, classified in class 435 subclass 69.1, for example.
- VII. Claims 12-14 and 17-21, 23-25 and 29 drawn to a recombinant nucleic acid comprising a gene coding for an enzyme permitting transfer of one or more alkyl groups to the double bond(s) of an unsaturated fatty acid, and vectors and  
15 plants comprising said DNA, classified in class 536, subclass 23.6, for example.
- VIII. Claim 15, drawn to a recombinant nucleic acid encoding a malonyl CoA decarboxylase, classified in class 536, subclass 23.6, for example.
- IX. Claim 16, drawn to a recombinant nucleic acid comprising a gene coding for a  
20 product which induces synthesis of branched fatty acids and further comprising a gene for SAM synthetase, classified in class 536, subclass 23.1, for example.

- X. Claim 22, drawn to production of branched fatty acids by cell culture, classified in class 435, subclass 70.1, for example.
- XI. Claims 26-28, drawn to branched fatty acids and a composition comprising them and use, classified in class 426, subclass 601, for example.

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The inventions are distinct, each from the other because:

10 The inventions of Groups I-XI are distinct products and methods, wherein one is not required by the other. The methods of Groups I-VI differ one from each of the others in requiring different components and method steps, as well as differing in their starting and end-  
products. In addition, the recombinant nucleic acids and plant products of Groups VII-XI are each distinct products that differ chemically and structurally and can be used independently from the methods of Groups I-IV, such as for production of the enzymes in a bacterial cell, for example; and are not required by the methods of Groups I-VI, which could use any one of the other nucleic acids. Thus the inventions of Groups I-XI are each capable of being separately  
15 made, independently used and the patentability of one would not render the other obvious or unpatentable.

20 Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, and the requirement for different areas of search, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (703) 308-1794. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone number for this Group is (703) 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Any inquiry of a general nature or relating to the status of this application should be directed to the legal analyst, Gwendolyn Payne, whose telephone number is (703) 305-2475, or to the Group receptionist whose telephone number is (703) 308-0196.

Elizabeth F. McElwain, Ph.D.  
May 30, 2002

ELIZABETH F. McELWAIN  
PRIMARY EXAMINER  
GROUP 1800

